Abstract

The invention disclosed a new process of asymmetric alkynylation of ketone or ketimine, involving the chiral ligand-mediated asymmetric addition of zinc or copper acetylide to a trifluoromethyl ketone or ketimine intermediate to give a chiral tertiary proparglic alcohols or amines. The adduct compounds include the key precursors to the potent HIV reverse transcriptase inhibitor Efavirenz (DMP 266), DPC 961 and DPC 083. The invention also disclosed a novel chiral amino alcohol ligand.

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